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| PPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|---|-------------|----------------------|-------------------------|-----------------|
| 09/888,235 | 06/22/2001 | Joan P. Blonder | 42830-00234 | 8106 |
| | 01/20/2004 | | EXAMINER | |
| MARSH, FISCHMANN & BREYFOGLE LLP 3151 SOUTH VAUGHN WAY | | | LI, BAO Q | |
| SUITE 411 | | | ART UNIT | PAPER NUMBER |
| AURORA, CO | 80014 | | 1648 | |
| | | | DATE MAILED: 01/28/2004 | ı |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) |
|--|--|---|
| | 09/888,235 | BLONDER ET AL. |
| Office Action Summary | Examiner | Art Unit |
| | Bao Qun Li | 1648 |
| The MAILING DATE of this communicate Period for Reply | tion appears on the cover sheet w | ith the correspondence address |
| A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNICA - Extensions of time may be available under the provisions of 37 after SIX (6) MONTHS from the mailing date of this communic. - If the period for reply specified above is less than thirty (30) da - If NO period for reply is specified above, the maximum statutor - Failure to reply within the set or extended period for reply will, in any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b). Status | TION. 7 CFR 1.136(a). In no event, however, may a ration. 19s, a reply within the statutory minimum of thirt ry period will apply and will expire SIX (6) MON. 19s, statute, cause the application to be 2000. | reply be timely filed ty (30) days will be considered timely. ITHS from the mailing date of this communication. |
| 1) Responsive to communication(s) filed or | n <u>28 October 2003</u> . | |
| | ☐ This action is non-final. | |
| 3) Since this application is in condition for a closed in accordance with the practice u | allowance except for formal matte under <i>Ex parte Quayle</i> , 1935 C.D | ers, prosecution as to the merits is . 11, 453 O.G. 213. |
| Disposition of Claims | | |
| 4) Claim(s) <u>1,4-7,9-31 and 33-44</u> is/are per | | |
| 4a) Of the above claim(s) is/are w | rithdrawn from consideration. | |
| 5) Claim(s) is/are allowed. | | |
| 6)⊠ Claim(s) <u>1,4-7,9-31 and 33-44</u> is/are reje | ected. | |
| 7) Claim(s) is/are objected to. | | |
| 8) Claim(s) are subject to restriction | and/or election requirement. | |
| Application Papers | | |
| 9)☐ The specification is objected to by the Ex- | aminer. | |
| 10) The drawing(s) filed on is/are: a) | ☐ accepted or b)☐ objected to b | y the Examiner. |
| Applicant may not request that any objection | to the drawing(s) be held in abeyand | e. See 37 CFR 1.85(a). |
| Replacement drawing sheet(s) including the | correction is required if the drawing(s | s) is objected to. See 37 CFR 1.121(d) |
| 11) I he oath or declaration is objected to by t | the Examiner. Note the attached | Office Action or form PTO-152. |
| Priority under 35 U.S.C. §§ 119 and 120 | | |
| 12) Acknowledgment is made of a claim for for a) All b) Some * c) None of: 1. Certified copies of the priority docu | Iments have been received | , |
| 2. Certified copies of the priority docu3. Copies of the certified copies of the application from the International B | iments have been received in App e priority documents have been re Bureau (PCT Rule 17.2(a)). | eceived in this National Stage |
| * See the attached detailed Office action for 13) Acknowledgment is made of a claim for do since a specific reference was included in the 37 CFR 1.78. | mestic priority under 35 U.S.C. § he first sentence of the specificati | 119(e) (to a provisional application) ion or in an Application Data Sheet. |
| a) ☐ The translation of the foreign languag | mostic priority under 25 U.S.C. Common | en received. |
| 14)⊠ Acknowledgment is made of a claim for dor reference was included in the first sentence | e of the specification or in an Appl | s 120 and/or 121 since a specific lication Data Sheet. 37 CFR 1.78. |
| Attachment(s) | | |
| 1) | 8) 5) Notice of Info | nmary (PTO-413) Paper No(s) rmal Patent Application (PTO-152) |

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DETAILED ACTION

Claims 1, 4-7, 9-31 and 33-44 are pending.

الماشكين ويهملا أحاليوا أأراج المراجي

RCE

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/28/2003 has been entered. The Office Action of RCE follows:

Response to Amendment

This is a response to the amendment, paper No. 15, filed 10/28/03. Claims 1, 9 and 31 have been amended. Claims 2-3, 8, 32 and 45-147 have been canceled. Claims 1, 4-7, 9-31 and 33-44 are pending and considered before the examiner.

Please note any ground of rejection(s) that has not been repeated is removed. Text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

Claim Rejections - 35 USC § 103

- 1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- Claims 1, 4-7, 9-31 and 33-44 are still rejected under 35 U.S.C. 103(a) as being unpatentable over Balasubramanian et al. (b) (US Patent No. 6,416,947B), Viegas et al. (a: US Patent No. 5,071,644 and B: 5,593,683), Illum et al (a: Pharmaceutical Research, 1994, Vol. 11, No. 1186-1189), Cox (Vaccine 1997, Vol. 15, pp. 248-256) and Horner et al. (Cellular Immunnology 1998, Vol. 190, pp. 77-82) or over Ron et al. (WO 98/06438), Illum et al. (a: Pharmaceutical Research, 1994, Vol. 11, No. 1186-1189), Cox et al. (Vaccine 1997, Vol. 15, pp. 248-256), Horner et al. (CELLULAR IMMUNOLOGY 1998, Vol. 190, pp. 77-82) on the same ground as stated in the previous Office Action.

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3. Applicants asserted that as discussed in the prior-filed Response To Office Action (tiled April 28, 2003 by certificate of mailing procedure), the references of record do not disclose or suggest the specific combination of elements and formulation properties recited in the pending claims. Withdrawal of the rejection based on 35 U.S.C. 103(a), and issuance of a notice of allowance are respectfully requested.

- 4. Previously, Applicants submitted that Office Action appears to pick and choose claimed elements from a number of references and then, apparently using handing sight with the invention as guide, to find obvious the combination of theses elements in the precise manner of the invention. Applicants further emphasized that the nature of the invention of claims 1-44 is not the discovery of new antigens, new polymers, or new adjuvant, but it rather a very specific and narrow combination of components and a formulation properties for an antigen delivery composition. Moreover, Applicants further argued that examiner has made no showing of why one of ordinary skill in the art would select the specific components recited in claims 1-44 and then combine those specific components in the specific and narrow combination of claims 1-44.
- 5. In the previous Office Action, the examiner stated that the examiner's conclusion of obviousness is not based upon improper hindsight reasoning, it is based on the judgment on the knowledge which was within the level of ordinary skill at the time the claimed invention was made, which does not include knowledge gleaned only from the applicant's disclosure.
- 6. For example, the function of each component, such as property of reverse thermal viscosity of polyyakylene block copolymer is known in the art as disclosed by Balasubramanian et al. (b) (US Patent No. 6,416,947B), Viegas et al. (a: US Patent No. 5,071,644 and B: 5,593,683). The fact of CpG motif, the cytokine or chitosan being able to produce an enhanced immune response when they are co-administered with an antigen are all well known in the art as disclosed by Illum et al (a: Pharmaceutical Research, 1994, Vol. 11, No. 1186-1189), Cox (Vaccine 1997, Vol. 15, pp. 248-256) and Horner et al. (Cellular Immunnology 1998, Vol. 190, pp. 77-82) or over Ron et al. (WO 98/06438), Illum et al. (a: Pharmaceutical Research, 1994, Vol. 11, No. 1186-1189), Cox et al. (Vaccine 1997, Vol. 15, pp. 248-256), Horner et al. (CELLULAR IMMUNOLOGY 1998, Vol. 190, pp. 77-82). Therefore, it would have been obvious for any person with ordinary skill in the art to be motivate to make an immunogenic

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composition that producing an enhanced immune response by just COMBINING EQUIVALENTS KNOWN MATERIALS IN THE ART FOR THE SAME PURPOSE.

Equivalence for the Same Purpose", which cites that "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850. The board held that it would have been prima facie obvious, within the meaning of 35 U.S.C. 103, to employ these components in combination for their known functions and to optimize the amount of each additive...". Because Applicants have not shown that he claimed invention is an unexpected result, the rejection is still maintained as a prima facie obvious absence of unexpected result.

Conclusion

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bao Qun Li whose telephone number is 703-305-1695. The examiner can normally be reached on 7:00 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Housel can be reached on 703-308-4027. The fax phone number for the organization where this application or proceeding is assigned is 703-308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Bao Qun Li

January 22, 2004

Junes C. House 1/24/04